THOMPSON et al Appl. No. 10/784,919 December 22, 2006

AMENDMENTS TO THE DRAWINGS

Please substitute attached Figures 3 and 4 for those originally filed. Reference numerals have been corrected on Figures 3 and 4 to be in compliance with the present

specification.

Attachment: Replacement Sheet(s)

Annotated Sheet Showing Changes

- 8 -

REMARKS/ARGUMENTS

Claims 1-19 stand in the present application, claims 1, 2, 4, 6, 9, 12, 14 and 16 having been amended. Reconsideration and favorable action is respectfully requested in view of the above amendments and the following remarks.

In the Office Action, the Examiner has objected to the specification because it lacks section headings. As noted above, the specification has been amended to correct this deficiency and a typographical error has also been corrected.

The Examiner has objected to the drawings because Figure 1 lacks the label "Prior Art." Applicants respectfully submit that it would be improper to label Figure 1 as Prior Art for the following reason. Although Figure 1 discloses a typical computer architecture it is also noted that the software loaded into Figure 1 is novel and not believed to be in the prior art. Accordingly, it is respectfully submitted that the label Figure 1 Prior Art would be misleading and Applicants respectfully request that the Examiner withdraw the rejection to Figure 1.

The Examiner has also objected to the drawings under 37 CFR 1.83(a) (see page 2 of the Office Action) and has objected to claims 1-19 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Applicants respectfully traverse the Examiner's objections to the drawings and rejection of the claims under § 112, first paragraph.

The Examiner has made a number of objections under 35 U.S.C. § 112, first paragraph, relating to enablement. It is respectfully submitted, however, that all the claim elements can be found in the written description, not only in the consistory clauses on page 3, but also in the detailed description of the embodiment.

As stated at the end of page 10 of the present specification, the invention is preferably embodied in software operating a general purpose computer. The means referred to in the claims are defined by their functions, and those functions are all specified in the description, as follows:

- 1a. the "moderation means" which records amendments is embodied as the "edit and query function" 1, described on page 6 and shown in Figure 3);
- 1b / 9 the "moderation inputs" are the amendments themselves described on page as "proposed change of a resource" e.g., step 40 shown in Figure 4;
- 1c / 9 the "rating means" 5 forms part of the moderation means, and generates a moderation value: it is described on page 7 and page 9 and shown in Figure 3;
- 3. the "amendment moderation value generation means" is part of the rating means 5, generating changes to the ontology rating. Changes to the rating are discussed on page 7, and shown in Figure 3;
- 4 / 12. the "user moderation value store" is part of the user profile 24a changes to the value stored therein are discussed on page 10, step 47, and is shown in Figure 4;
- 5 / 13. the "means for storing a quality rating for each resource" is part of the resource repository 23 (shown in Figure 2): as stated on page 7 line 23, each resource is allocated a quality value;
- 6. the analysis means for identifying reference links and using them to generate a quality rating indicative of the significance of that resource is discussed on page 7 lines 31-33 in conjunction with Figure 2;

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- 7a. the "amendment storage means" is referred to on page 7 lines 3 to 6, and is either the memory of the serving computer, or another computer accessible by the internet using a hyperlink, as identified by 37, 38 in Figure 3;.
- 7b. the "means for receiving quality values" and "for amending the data resource" are again the edit and query function 1 shown in Figure 3;

8 / 16 / 17 the ability to delete amendment proposals is discussed on page 4 lines 13-17 and page 9 lines 24-26 identified by 1 and shown in Figure 3. Apart from the different scoring criteria (the subject of claim 17), there is no fundamental difference between a deletion and any other amendment.

The Examiner has also objected to claims 6, 9, 14 and 16 for a number of informalities as detailed at page 3 of the Office Action. Applicants have corrected each of the deficiencies noted by the Examiner and accordingly, the Examiner's objections to these claims is now believed to have been overcome.

The Examiner has rejected claims 1-19 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants respectfully traverse the Examiner's § 112, second paragraph rejection of the claims and has amended certain of the claims in order to clarify their meaning, as will be described in greater detail below.

Regarding the objections under 35 U.S.C. § 112, second paragraph, in claims 1 and 9: the "moderation means" does have a recording function - it records the moderation inputs to the amendments it receives. The term is therefore believed to be appropriate, however, if the Examiner can suggest alternative terminology, Applicants will consider it. The "moderation inputs" are the inputs generated by the human users of

the system, which, as the claim specifies, are used by the rating means to generate the "moderation values." The moderation value is therefore a parameter generated by the CPU based on the ratings given by the users. The amendments referred to are those amendments made to the data in the resource made by the users using the access means. In any event, claim 1 has been clarified by reciting "......access means for allowing a plurality of users to make amendments to the data resource, moderation means for recording such amendments, and for recording moderation inputs made by the users relating to such amendments,"

The Examiner's difficulty with whether the moderation means or rating means generates the moderation value is not understood: the claim states that it is the rating means. The Examiner objects that the rating means does not receive the moderation inputs, but it is implicit that if it generates a value from some input, it must necessarily receive that input. In any event the end of claim 1 has been amended to read that the moderation value is "...determined by such moderation inputs received from the moderation means.

The step the Examiner considers to be missing from claim 9 is the "human in the loop." Under 35 U.S.C. § 101 the Examiner has also objected that the sources of the amendments and of the moderation inputs are not specified. Since this is a method claim it need not be limited to any specific means. To further clarify the claim, however, Applicants have amended claim 9 to read: "recording amendments made to the resource by a user, and for retrieval by users; receiving moderation inputs generated by one or more users relating to such amendments.".

The Examiner's comment that the invention of claim 9 fails to provide useful results is simply not understood - the result is the generation and maintenance of the data resource.

Returning to the objections under 35 U.S.C. § 112, second paragraph, in claim 2, the objection to the term "qualities" seems to miss the point that the data involved is user-generated data. This data relates to the quality of data (specifically amendments to the database) previously generated by other users. Clarification by replacing "assessing qualities of amendments " by "the data relating to the users' assessments of the quality of amendments......" has been made to claim 2.

Regarding claim 3 line 3, the meaning of "consistency" of amendments in the context of the invention is discussed in detail in the description on page 9

Regarding claim 4 line 3, the passage quoted by the Examiner is inadvertently missing the semicolon after "by that user" that was present in the original and now has been restored by amendment of claim 4. In answer to the Examiner's query, the user moderation value store is indeed a storage means. It stores the values generated by the means for generating, and the retrieval means retrieves the values from it.

Regarding claim 12, the Examiner asks whether the value is generated in respect of the user or of his input - each user has a respective moderation value associated with him - that value (which may vary with time) is applied to the inputs generated by that user. This claim has been clarified by stating "a user-specific moderation value is generated in respect of each user and applied to inputs made by that user"

The invention could be applied to any data resource where entries can be amended by any contributor. However, in many such databases, such as

Wikipedia, each entry is largely independent of the others, so unreliable contributors only affect the entries they directly amend, and their changes are easy to rectify. This invention is of particular relevance to cross indexing systems - reference sources where entries are interlinked by an ontology - as changes to the ontology can affect the entire database As discussed on page 2, each amendment necessarily relies on the ontology created by all previous amendments, undoing an amendment may necessitate scrapping all subsequent ones as well, hence the need for moderation to prevent inconsiderate or inexperienced users initiating such detrimental changes.

In view of the above described claim amendments and comments, the Examiner's § 112, second paragraph rejection of the claims is believed to have been overcome.

The Examiner has rejected claims 1-19 under 35 U.S.C. § 102(e) as being anticipated by Cho et al. (hereinafter "Cho"). Applicants respectfully traverse the Examiner's § 102 rejection of the claims.

Turning now to the objections under 35 U.S.C. § 102, the distinction between the invention and the cited prior art may now be clearer following the above discussion. The reference Cho (US6741986) seems to be for reviewing articles and paying reviewers. A moderator (reviewer) scores the contributor according to the number of errors he records. What is lacking in the cited reference is any feedback of either the original contributor's or the reviewer's performance to provide a weighting for the reliability of future contributions. In particular, the cited system seems to assume that the reviewer is more authoritative than the original contributor whereas, in a completely open system (i.e., Wikipedia, for example) the opposite is just as likely to be the case

A key feature in the present specification is described by the phrase "the moderation value being determined by such moderation inputs." Applicants' invention provides a community moderation system where the significance of an individual contribution is determined by the standing of the user, which in turn is determined by the significance of the contributions that he has made in the past. The moderation value is the rating of this contribution, and is determined by the cooperative actions of the other users in accepting or rejecting previous moderations from this person (their moderation inputs), adjusted for how significant the resource at hand is, and how significant the resources that the user had moderated previously were.

Cho has no concept of the value of a moderation being measured and fed back into the future significance of the activities of the users. (In short, there is no means for supervising the moderators - "Quis Custodiet Ipsos Custodes?") It assumes throughout that the reviewer is more authoritative than the original contributor - (and the second reviewer more authoritative than the first.......). Applicants' invention allows a consensus to be generated, by using the reliability of a contributor's previous work, as assessed by his peers, to assess the reliability of a new piece of work.

Accordingly, all of claims 1-19 which clearly recite the patentable distinctions detailed above over Cho are believed to patentably define over the cited reference.

Therefore, in view of the above amendments and remarks, it is respectfully requested that the application be reconsidered and that all of claims 1-19, standing in the application, be allowed and that the case be passed to issue. If there are any other issues remaining which the Examiner believes could be resolved through either a

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supplemental response or an Examiner's amendment, the Examiner is respectfully requested to contact the undersigned at the local telephone exchange indicated below.

Respectfully submitted,

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